AMENDMENTS THE CLAIMS

Claims 1-3 (Canceled).

Claim 4 (Currently Amended): A diffraction element comprising:

a diffraction grating having a concave/convex shape in cross-section formed in an incoming-side surface and an outgoing-side surface of a transparent a substrate, comprising

wherein the <u>an</u> incoming-side surface is opposite the <u>to an</u> outgoing-side surface, and the incoming-side surface is configured to receive light external to the <u>diffraction grating</u> substrate,

the a diffraction grating comprises comprising:

an incoming-side diffraction grating <u>having a concave/convex shape in cross-section</u>
disposed in a central region of the incoming-side surface; and at least one

<u>a first</u> outgoing-side diffraction grating <u>having a concave/convex shape in cross-section</u> disposed in the outgoing-side surface and configured to receive light diffracted by the incoming-side diffraction grating, the grating pitch of the incoming-side diffraction grating is <u>being</u> substantially equal to the grating pitch of the <u>at least one first</u> outgoing-side diffraction grating[[,]]; and

the incoming-side diffraction grating and the at least one a second outgoing-side diffraction grating are formed in comprising a single layer inorganic film formed on the incoming-side and outgoing-side surfaces and having a concave/convex shape in cross-section, the second outgoing-side diffraction grating disposed in the first outgoing-side diffraction grating.

Claim 5 (Currently Amended): The diffraction element according to Claim 4, wherein the at least one first outgoing-side diffraction grating is a reflection type diffraction grating.

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Claim 6 (Currently Amended): The diffraction element according to Claim 5, wherein the at least one first outgoing-side diffraction grating is a diffraction grating having has a saw-tooth concave/convex portion or a pseudo sawtooth diffraction grating wherein a saw-tooth shape is approximated by stairs.

Claim 7 (Currently Amended): The diffraction element according to Claim [[6]] 5, wherein the at least one first outgoing-side diffraction grating comprises the a pseudo sawtooth diffraction grating in which the having a saw-tooth shape is approximated by the stairs, and a height or depth of a first step of the stairs is different from a height or depth of a second step of the stairs.

Claims 8-11 (Canceled).

Claim 12 (Currently Amended): A method of diffracting light with a diffraction element including a diffraction grating having a concave/convex shape in cross-section formed in an incoming-side surface and an outgoing-side surface of a transparent substrate, in which the incoming-side surface is opposite the outgoing-side surface, and the incoming-side surface is configured to receive light external to the diffraction grating, the diffraction grating includes including an incoming-side diffraction grating disposed in a central region of the incoming-side surface and two a first outgoing-side diffraction gratings grating disposed in the outgoing-side surface and configured to receive light diffracted by the incoming-side diffraction grating, the grating pitch of the incoming-side diffraction grating is being substantially equal to the grating pitch of at least one of the two the first outgoing-side diffraction gratings grating, the incoming-side diffraction grating and the two and the

diffraction grating including a second outgoing-side diffraction gratings are formed in grating with a single layer inorganic film formed on the incoming-side and outgoing side surfaces, the second outgoing-side diffraction grating disposed in the first outgoing-side diffraction grating, and the two the first and second outgoing-side diffraction grating are gratings being reflection type diffraction gratings each having a saw-tooth concave/convex portion or a pseudo sawtooth diffraction grating wherein a saw-tooth shape is approximated by stairs, the method comprising:

directing to a wavelength measuring apparatus light diffracted by the at least one of the two first and second outgoing-side diffraction gratings which has the grating pitch substantially equal to the grating pitch of the incoming side diffraction grating.

Claim 13 (Previously Presented): The method according to claim 12, wherein the incoming-side diffraction grating has a saw-tooth shape.

Claim 14 (Currently Amended): A diffraction element comprising:

- a substrate having first and second surfaces opposite one another;
- a first single organic layer disposed on the first surface;
- a second single organic layer disposed on the second surface;
- a first diffraction grating disposed in a central portion on the first single organic layer of the first surface, the first diffraction grating configured to receive light from outside of the substrate, the first diffraction grating having a first grating pitch; and

a second diffraction grating disposed on the second single organic layer in the second surface, the second diffraction grating configured to receive light diffracted by the first diffraction grating, the second diffraction grating having a second grating pitch about equal to the first grating pitch, and

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a third diffraction grating comprising a single layer inorganic film, the third diffraction grating disposed in the second diffraction grating.